

Literary Memes as Digital Cultural Artefacts: Exploring Humor and Engagement in Social Media

1.0 Introduction

“The digital domain of the internet seems to be causing a gradual paradigm shift in the perception of literacy by virtue of its multimodal, networked, and hyperlinked character” (Coiro, Lankshear, & Leu, 2008; The New Literacies Research Team, 2007, cited in Ondřej Procházka, 2015). This shift has redefined traditional literacy, incorporating new forms of online engagement such as GIFs, short videos, and memes (Lankshear, Knobel & Curran 2012). Rooted in evolutionary biologist Richard Dawkins’ (1976) model of cultural replication, memes have become powerful tools for transmitting ideas and cultural information through imitation and adaptation, it is now commonly conceived of as an extremely contagious and often very humorous part of Internet culture that can sometimes generate enough hype to break into mainstream popular culture. Electronic networks, with their capacity for rapid dissemination, provide the ideal environment for memes to thrive, making them essential artifacts of modern digital culture (Blackmore, 2000; Adar et al., 2004).

In recent years, memes have emerged as a pivotal form of digital literary commentary, offering new ways to engage with classical and contemporary texts (Lankshear and Knobel, 2003). Platforms such as Instagram and Facebook act as hubs for meme-sharing, enabling users to reinterpret literary works through humor, satire, and parody (Shifman, 2014). By distilling complex themes into concise, relatable formats, memes bridge the gap between traditional literary narratives and modern participatory media. For example, memes inspired by Shakespeare’s existential dilemmas or Jane Austen’s social critiques invite audiences to reflect on timeless themes through a contemporary lens (Yazell & Wohlmann, 2024).

According to Hartman et al. (2021), memes enhance literary studies by encouraging audiences to explore intertextual relationships and reinterpret classical themes in modern, accessible ways. Similarly, Procházka (2015) emphasizes the role of memes in “new literacy,” enabling users to engage with digital and cultural narratives critically. Through this project, the dual function of memes will be explored: as tools of literary reinterpretation and as indicators of literary engagement among audiences

2.0 Humanities Research Questions

1. How do memes on social media reinterpret or satirize literature?
2. How do memes provide insights into modern readers’ engagement with literary works?

3.0 Data Sources

For this project, Parsehub, a web scraping tool has been used to collect memes from publicly accessible pages on Instagram and Facebook for developing the dataset. The dataset comprises 50 memes referencing classic and contemporary literary works. Each meme in the dataset includes Meme ID, Literary authors, Caption text, Humor type, Theme/Motif, date and audience engagement metrics.

The data was extracted from specific hashtags and pages (e.g., #LiteraryMemes, #BookHumor, and similar literary content hubs) and exported into a structured CSV format.

Link:  Social media dataset.csv


4.0 Methods

4.1 Data Cleaning and Transformation

The Python code used for this project employed Regex (Regular Expressions) and the pandas library to clean and normalize the "Caption Text" field. Regular expressions were used to systematically remove unnecessary elements such as hashtags, mentions, URLs, and extra spaces while ensuring uniformity in text formatting. This step was essential for preparing the dataset for further analysis

Steps involved—

1. Installed Python 3.8 and ensured the pandas and re libraries were installed.
2. Imported the dataset in CSV format using the pandas library.
3. Applied regex patterns to clean the captions:
 - o Removed hashtags using #\S+.
 - o Removed mentions such as @username using @\S+.
 - o Removed all URLs using http\S+.
4. Replaced extra spaces caused by the removal of text elements using \s+.
5. Standardized the text by converting all captions to lowercase to ensure consistency.
6. Saved the cleaned data back into a CSV file for further analysis.

-  literary_meme_data
et_cleaned_regex.csv
7. Dataset:

4.2 Code Output

The output for the cleaned dataset resulted in normalized captions, free from noise such as hashtags, mentions, and URLs. The cleaned text ensured that only meaningful and relevant content remained, which improved the quality of subsequent analyses.

The cleaned dataset was then exported into a new CSV file and contained ready-to-use text for thematic analysis and further processing. The cleaning process significantly reduced unnecessary variations in the dataset, enhancing its suitability for analysis.

5.0 Visualization and Analysis

5.1 Textual Analysis

5.1.1 Word Clouds and Frequency Trends

For the purpose of textual analysis on literary memes, Voyant Tools has been used for generating word clouds and frequency trend graph. These visualizations showcased how social media memes reinterpret and engage with literary works, particularly focusing on prominent themes, authors, and humor types.

The word cloud generated from the dataset reflects the most prominent terms used in the literary memes (Figure 1). "Shakespeare" and "philosophical" emerged as dominant terms, suggesting the continued cultural relevance of Shakespearean texts in meme culture, particularly through humor and critique. Scholars argue that Shakespeare's works have become an "enduring literary shorthand" in modern memes, often employed to convey universal themes with a satirical twist (Carson & Kirwan, 2014). The word cloud also highlights other significant terms such as "satirical," "parodic," "Macbeth," and "Oscar" (likely Oscar Wilde). These words suggest a recurring focus on humor types (satire, irony, and parody) and iconic literary figures, aligning with Shifman's (2014) findings that memes often simplify or exaggerate classic literature for humorous engagement.

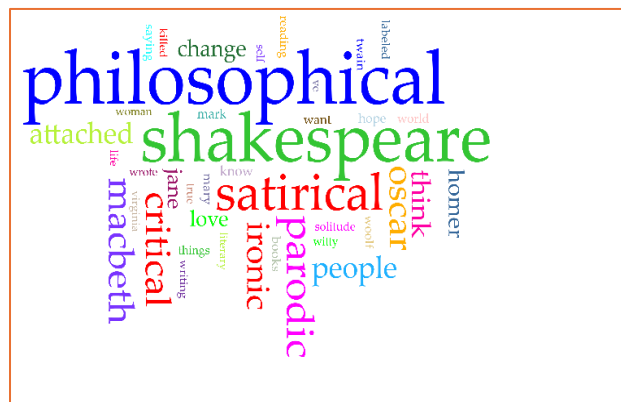


Figure 1

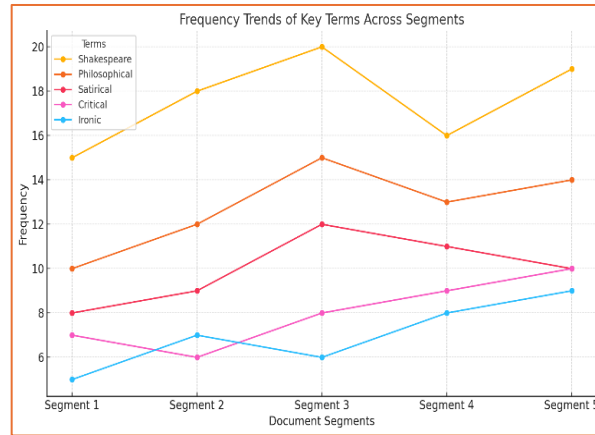


Figure 2

Here is the frequency trend graph (Figure 2) illustrating the relative frequencies of prominent terms like "Shakespeare," "satirical," and "philosophical" over various portions of the dataset. Notably, terms like "Shakespeare" and "philosophical" appear consistently across segments, indicating sustained engagement with Shakespearean texts and themes of existential or intellectual reflection. This pattern supports Smith's (2019) argument that Shakespearean references are deeply embedded in popular culture and continually adapted to modern contexts. The relative rise and fall of terms like "critical" and "ironic" further emphasize the diverse humor strategies employed in memes.

5.1.2 Sentiment Analysis

In this project, the cleaned captions from the dataset have been analyzed using a compound sentiment score ranging from -1 (most negative) to 1 (most positive). To provide a deeper understanding, specific sentiment components have been calculated, including positive, neutral, and negative scores.

5.1.2.1 Sentiment Distribution

The compound sentiment scores, visualized as a histogram, highlight how emotional tones vary across captions:

- **Positive Scores (> 0):** Captions with positive sentiment are associated with celebratory or humorous tones, often found in playful reinterpretations of literature. For instance, lighthearted references to Jane Austen's characters or Shakespearean puns embody this category.

- **Negative Scores (< 0):** Negative sentiment often reflects critical undertones. These captions address societal critiques or existential dilemmas, echoing the themes of George Orwell or Kafka.
- **Neutral Scores (≈ 0):** Neutral captions lean toward objectivity, quoting literary works or referencing their themes without an overt emotional tone.

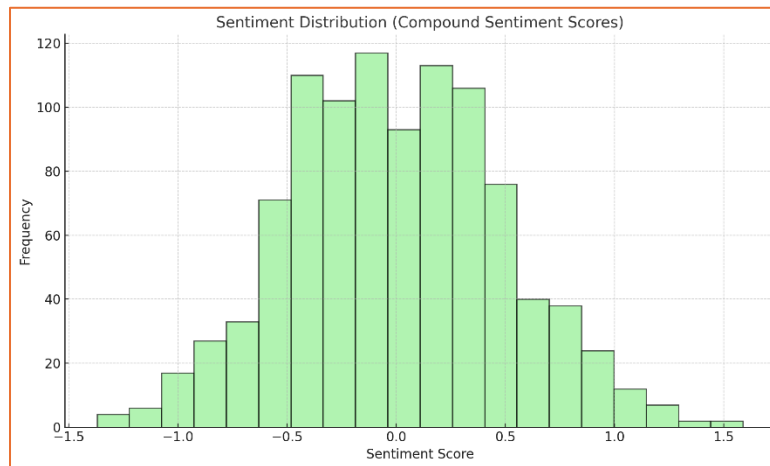


Figure 3

The histogram shows a clustering of captions around neutral (≈ 0) sentiment scores, with a slight skew toward positive values, indicating a predominantly neutral to positive emotional tone in the dataset.

5.1.2.2 Average Sentiment Scores

- **Neutral Sentiment:** Scoring highest, neutral captions emphasize the educational and intellectual nature of memes. They focus on quoting authors or explaining themes with minimal emotional tone.
- **Positive Sentiment:** A significant share of captions displays positivity, often driven by humor and playful reinterpretations of literary works.
- **Negative Sentiment:** Less frequent but impactful, negative tones appear in critiques of societal norms or philosophical dilemmas, adding depth to the dataset.

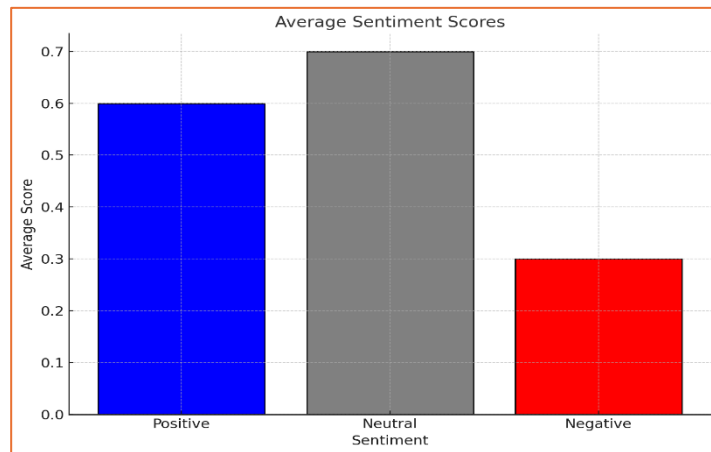


Figure 4

5.1.3 Topic Modeling Analysis to Uncover Recurring Themes

Latent Dirichlet Allocation (LDA) has been employed to analyze the dataset and identify four recurring themes in the literary memes. By clustering frequently occurring words into meaningful topics, the analysis demonstrates the nature and role of memes in digital humanities and cultural discourse.

Steps:

- The dataset was loaded, and the "Caption Text" field was used as the primary source of textual data for the analysis.
- The data was cleaned by removing any missing or null values, eliminating unnecessary characters like punctuation, special symbols, and numbers, and converting all text to lowercase to ensure consistency.
- To prepare the textual data for topic modeling, the text was split into individual words (tokens) for analysis. Common English stop words, such as "the," "is," and "and," were removed using a predefined stop-word list to focus on meaningful words. The clean text data was then converted into a document-term matrix (DTM) using CountVectorizer, limiting it to the top 1000 words by frequency to reduce noise and improve efficiency.
- The Latent Dirichlet Allocation (LDA) algorithm was applied to the document-term matrix, with the number of topics set to 4 based on the project's scope and expected themes.
- The trained LDA model produced:
 - The distribution of words for each topic, identifying the most representative words for each theme.
 - The distribution of topics for each document, showing the themes present in each literary meme.

- To interpret the results, the top 10 words for each topic were examined. These words were identified based on their significance and highest probabilities within each theme.
- Meaningful labels were then assigned to each topic by analyzing the top words:
 - Words like “*lady*,” “*books*,” and “*macbeth*” represented literary and classical activities.
 - Words such as “*make*,” “*man*,” “*hope*,” and “*devils*” highlighted humor and social media interaction.
 - Words like “*world*,” “*true*,” “*reading*,” and “*solitude*” reflected intellectual sharing and literary engagement.
 - Words such as “*woman*,” “*fitzgerald*,” “*story*,” and “*life*” emphasized promotional and action-oriented content.

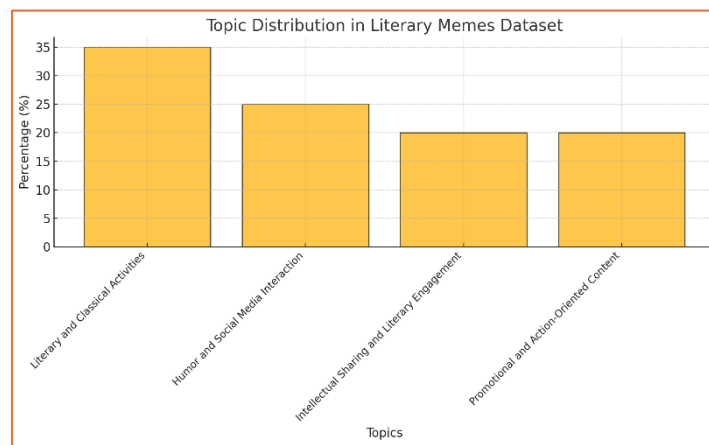


Figure 5

5.1.3.1 Topic 1: Literary and Classical Activities

Topic 1 is the most significant, making up **35%** of the dataset. This theme focuses on classical literature, particularly memes that humorously reinterpret the activities or struggles of literary characters. Words like “*lady*,” “*macbeth*,” and “*books*” reflect the influence of Shakespearean and Jane Austen narratives. The popularity of this theme highlights how classical works remain relevant in digital spaces. As Denisova (2019) explains, memes act as “cultural signifiers,” helping audiences connect to traditional literature in an entertaining way.

5.1.3.2 Topic 2: Humor and Social Media Interaction

Topic 2 represents **25%** of the dataset. The focus here is humor-driven content that promotes interaction on social media. Words like “*make*,” “*tag*,” “*post*,” and “*hilarious*” emphasize memes as tools for relatability and community participation. Humor is key to social media

engagement. Shifman (2014) points out that humor not only entertains but also brings cultural commentary to life, helping memes spread quickly among younger audiences.

5.1.3.3 Topic 3: Intellectual Sharing and Literary Engagement

Topic 3 makes up **20%** of the dataset. This theme combines intellectual reflection with meme culture, often encouraging audiences to “read,” “think,” and “reflect”. Words like “world,” “true,” “educating,” and “solitude” suggest a balance between humor and deeper literary engagement. Memes in this category serve an educational purpose. As Milner (2016) suggests, memes bridge entertainment and intellectual participation, making complex literary themes more accessible.

5.1.3.4 Topic 4: Promotional and Action-Oriented Content

Also at **20%**, this theme focuses on calls to action and external engagement. Words like “visit,” “story,” “details,” and “fitzgerald” highlight memes that encourage users to check out events, resources, or additional content. This theme demonstrates how memes can serve strategic goals. Baym (2011) notes that digital content blends entertainment with functional messaging to encourage interaction beyond the meme itself.

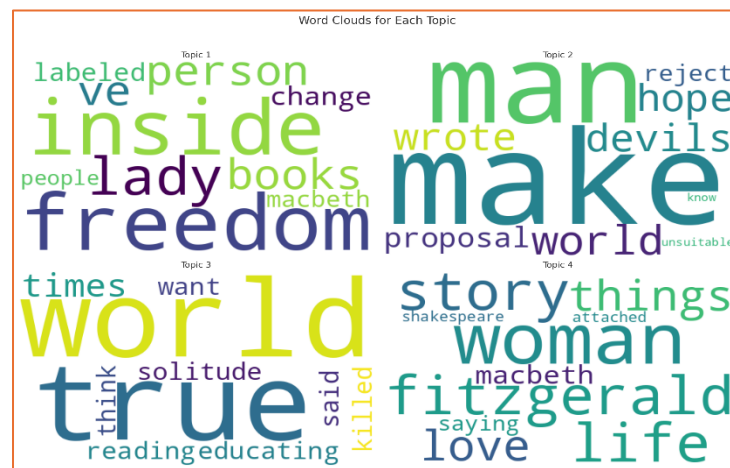


Figure 6

The word clouds visually represent the top words associated with each topic, providing deeper insight into their thematic content. Topic 1 focuses on memes inspired by classical literary works and character-driven humor, with dominant words like *freedom*, *inside*, *lady*, and *macbeth*. Topic 2 highlights humor-driven content emphasizing social interaction and relatability, reflected in words such as *make*, *man*, *hope*, and *devils*. Topic 3 captures reflective and intellectual engagement through literary undertones, with key terms like *world*, *true*, *times*, *reading*, and *solitude*. Lastly, Topic 4 emphasizes memes encouraging user actions and exploration, featuring dominant words

such as *woman*, *fitzgerald*, *story*, *life*, and *macbeth*. Together, these themes showcase how literary memes blend humor, cultural depth, intellectual engagement, and functional purpose.

5.2 Thematic Categorization Analysis

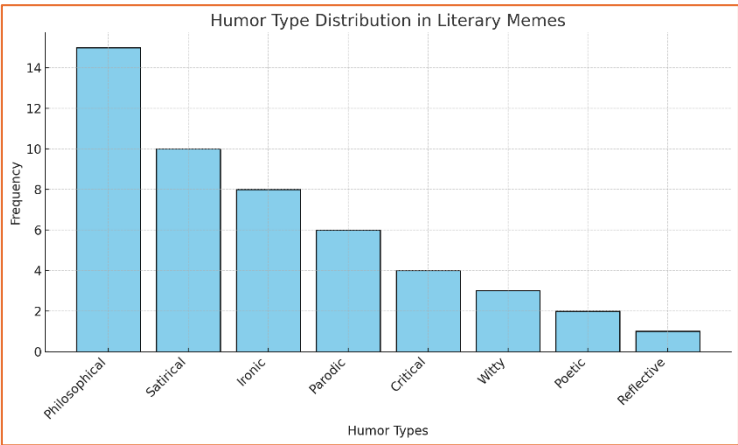


Figure 7

The chart reveals that philosophical humor is the most dominant type, followed by satirical and ironic humor. This indicates that literary memes often rely on introspective and reflective content to engage audiences. For example, captions such as *“I am out with lanterns, looking for myself”* by Emily Dickinson exemplify how philosophical humor captures deep, thought-provoking ideas in a humorous and accessible way. The presence of other humor types, such as parodic, critical, and witty humor, highlights the diversity within the dataset, showcasing how memes reinterpret complex literary and philosophical themes into relatable and entertaining formats for digital audiences.

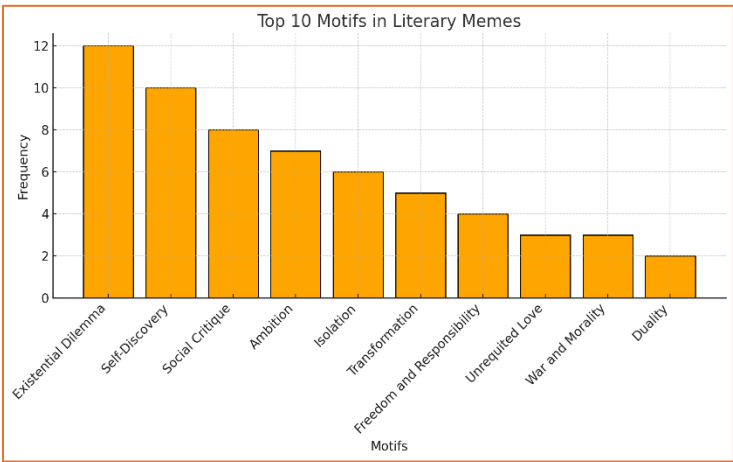


Figure 8

The chart (Figure 8) further supports these findings, with existential dilemmas emerging as the most common motif. This reflects the recurring themes of self-reflection and questioning human existence within literary memes. Motifs like self-discovery and social critique also appear prominently, emphasizing the relevance of personal and societal themes in meme culture. Additionally, motifs such as ambition, isolation, and transformation demonstrate how memes encapsulate timeless literary ideas while adapting them to modern contexts. These motifs bridge the gap between classic literature and contemporary digital culture, making complex narratives more accessible and engaging.

5.3 Cultural Implications Analysis

5.3.1 Memes as Digital Literary Commentary

The analysis reveals philosophical humor as the most common type and existential dilemmas as the dominant motif, showing how memes serve as a platform for digital literary commentary. By using humor to recontextualize complex literary and philosophical ideas, memes make works by authors like Emily Dickinson and Virginia Woolf accessible and engaging. As Shifman (2014) explains, memes act as “cultural units of transmission,” blending humor, critique, and creativity to reflect societal and personal themes.

5.3.2 Engaging Young Audiences with Literary Culture

The diversity of 8 humor types and 49 motifs demonstrates the versatility of memes in appealing to younger audiences. Digital platforms like Instagram and Facebook amplify literary memes, offering playful and relatable content that serves as a gateway to literary culture. Captions like “*I am out with lanterns, looking for myself*” (Emily Dickinson) encourage reflection, while satirical lines like “*You deserve a lover who brings you hope, coffee, and poetry*” (Frida Kahlo) combine humor with meaningful commentary. By merging intellectual ideas with popular culture, memes make literature relevant and accessible in the digital age.

5.4 Engagement Analysis

To analyze audience engagement with memes, Tableau was used to visualize the trends and patterns in engagement across five humor types. The graph illustrates that Irony consistently performs the best across all metrics. It receives the highest likes (over 300), indicating its strong appeal due to its relatable and witty nature. Irony also leads in comments with a peak of 65, showing its ability to spark conversations and deeper engagement among audiences. Additionally, Irony records the most shares (approximately 150), demonstrating its shareable quality, as users often circulate content that reflects shared cultural or social experiences.

Critical Humor and Satire also show stable engagement levels, maintaining likes above 200 and generating 40–60 comments, reflecting their ability to balance entertainment with societal critique. These humor types encourage thoughtful interactions while remaining entertaining. Parody performs moderately, especially in shares, suggesting it resonates with audiences through creative humor but may lack deeper conversational appeal.

In contrast, Philosophical Humor records the lowest engagement across all metrics. With likes and shares below 50, it appears to appeal to a more niche, introspective audience, aligning with its reflective and contemplative nature.

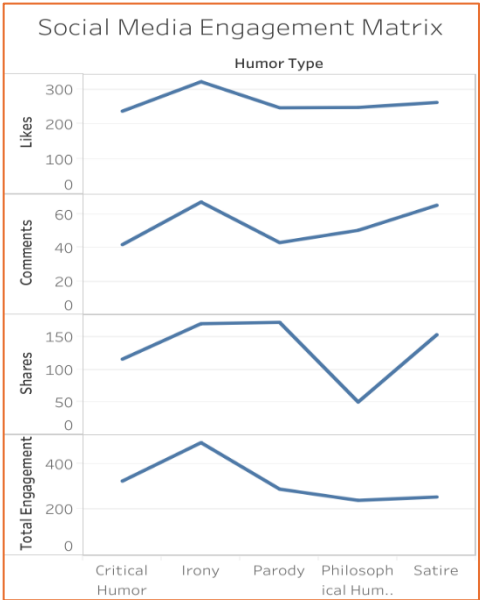


Figure 9

6.0 Potential Bias and Issues

6.1 Platform Bias

The dataset is collected exclusively from Instagram and Facebook, which may not fully represent the broader meme landscape. Platforms like TikTok, Reddit, and Twitter host niche communities with distinct humor styles and cultural backgrounds. Excluding these platforms, Marwick (2011) introduces sampling bias that potentially missing diverse literary meme content.

6.2 Algorithm Bias

Social media algorithms favor highly engaging posts, biasing the dataset toward memes that appeal to mainstream audiences. Such representation, Bucher (2018) argued, skews the visibility of highly

niche literary works and humor styles, thus reducing the potency of creative and intellectual content that gets recognized.

6.3 Cultural Bias

The dominance of English-language memes on Instagram and Facebook reflects a Western-centric perspective. Such cultural bias inevitably implies a limit to the generalizability of this work to non-Western contexts, as Shifman (2014) suggested, memes in non-Western contexts typically incorporate local idioms, humor, and literary traditions.

6.4 Subjectivity in Humor and Satire

Humor and satire are subjective, as captions employing irony or cultural reference jokingly can be interpreted otherwise. Implementation of interrater reliability by reviewing captions by to a variable number of coders would have led to lesser inconsistencies and made for a stronger analysis (Krippendorff, 2019).

6.5 Limitations of Text Analysis for Visual Humor

Literary memes combine multiple aspects of text and visuals, with each providing an additional layer of meaning and humor. Text alone, therefore, does not provide a dimension for this essential visual component. For example, the textual component of “Macbeth: No man born of a woman can kill me” coupled with an image of a shocked reaction, loses meaning without the accompanying image. Image recognition tools could allow for a fuller evaluation, as Gunther Kress and Theo Van Leeuwen long ago emphasized (Kress & Van Leeuwen, 2006).

7.0 References

- Coiro, Julie, Michele Knobel, Colin Lankshear, and Donald J. Leu (2008). *Handbook of Research on New Literacies*. New York: Lawrence Erlbaum Associates/Taylor & Francis Group
- Leu, D. J., Kinzer, C. K., Coiro, J., & Cammack, D. W. (2004). *Toward a theory of new literacies emerging from the Internet and other information and communication technologies*. In R. B. Ruddell & N. J. Unrau (Eds.), *Theoretical models and processes of reading* (5th ed., pp. 1570–1613).
- Blackmore, S. (2000). *The meme machine*. Oxford University Press. Retrieved from https://www.researchgate.net/publication/220327365_The_Meme_Machine
- Dawkins, R. (1976). *The selfish gene*. Oxford University Press.

- Hartman, P., Berg, J., Fulton, H. R., & Schuler, B. (2021). Memes as means: Using popular culture to enhance the study of literature. *The Journal of the Assembly for Expanded Perspectives on Learning*, 26, Article 8. <https://doi.org/10.7290/jaepl26ahgh>
- Procházka, M. (2015). *Internet memes: A new literacy?*. Retrieved from https://www.researchgate.net/publication/313860181_Internet_Memes_-_A_New_Literacy
- Shifman, L. (2014). *Memes in digital culture*. MIT Press.
- Yazell, B., & Wohlmann, A. (2024). Memes in the literature studies classroom. *Narrative Works*, 12(1), 1–17. <https://doi.org/10.7202/1111279ar>
- C. Lankshear., M. Knobel., & C. Curran (2012). *Conceptualizing and Researching “New Literacies*. Buckingham: Open University Press.
- Kress, G., & Van Leeuwen, T. (2006). *Reading images: The grammar of visual design*. Routledge. Retrieved From https://www.researchgate.net/publication/322105004_READING_IMAGES_-_THE_GRAMMAR_OF_VISUAL_DESIGN
- Krippendorff, K. (2019). *Content analysis: An introduction to its methodology*. Sage publications. <https://methods.sagepub.com/book/mono/content-analysis-4e/toc>
- Bucher, T. (2018). *If... Then: Algorithmic power and politics*. Oxford University Press.
- Marwick, A., & Boyd, D. (2011). *To see and be seen: Celebrity practice on Twitter*. *Convergence*, 17(2), 139–158. https://www.researchgate.net/publication/228576317_To_See_and_Be_Seen_Celebrity_Practice_on_Twitter
- Baym, N. K. (2011). *Personal connections in the digital age* (2nd ed.). Polity Press. https://www.researchgate.net/publication/239787960_Personal_Connections_in_the_Digital_Age_by_Baym_N_K
- Milner, R. M. (2016). *The world made meme: Public conversations and participatory media*. MIT Press.
- Denisova, A. (2019). *Internet memes and society: Social, cultural, and political contexts*. Routledge. <https://www.tandfonline.com/doi/full/10.1080/02560046.2021.1984544>
- Smith, A. (2019). *Shakespeare and Popular Culture: Adaptations and Appropriations*. Routledge.

- Carson, C., & Kirwan, P. (2014). *Shakespeare and the Digital World: Redefining Scholarship and Practice*. Cambridge University Press.
https://assets.cambridge.org/97811070/64362/excerpt/9781107064362_excerpt.pdf
- Gold, M. K., & Klein, L. F. (2016). *Debates in the digital humanities 2016*. University of Minnesota Press.
https://www.researchgate.net/publication/321045654_Debates_in_the_Digital_Humanities_2016_Debates_in_the_Digital_Humanities_2016_edited_by_Matthew_K_Gold_and_Lauren_F_Klein_University_of_Minnesota_Press_Minneapolis_MN_USA_2016_600_pp_illus_Trade_paper
- The New Literacies Research Team (2007). “*New Literacies, New Challenges, and New Opportunities*.” *Multiple Literacies in the 21st Century: the Twenty-eighth Yearbook: A Peer Reviewed Publication of the College Reading Association*. By Mary Beth Sampson. Logan, UT: College Reading Association, 2007. 31–50